Existing			EPA Issues Summary Description	EPA Issue Resolution Current Status	EPA Work Items <sup>9</sup>		LWG Work Ite	ems <sup>9</sup>	Target EPA/LWG	Tentative Te	echnical Leads	Current Issue Resolution Target Dates or EPA Draft Text Target Dates		LWG Review and Resolution Text Target Dates	
Draft FS Sections	Issue No.	EPA Issue Decision			Item	Target Date <sup>1</sup>	Item	Target Date <sup>1</sup>	Meeting Date to Discuss	LWG⁵	EPA <sup>6</sup>	Start <sup>7,8</sup>	Finish	Start	Finish
ES	ES Writing	NA	NA	NA	NA	NA	NA	NA		NA	NA	8-Aug-14	17-Dec-14	24-Jan-15	23-Feb-15
1, 2	Sec. 1 Writing	NA	NA	NA	NA	NA	NA	NA		NA	NA	14-Jan-14	2-Jul-14	8-Jul-14	8-Aug-14
	ŭ	RAO supporting narrative additions	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA
	2.2	COC Selections	EPA rationale for COC selections partially described. The LWG is requesting clarifications.	In progress: EPA provided COC selections on 13-Nov-13 and follow up summary on 12-Dec-13 in response to LWG questions. LWG provided additional COC selections questions to EPA on 21-Feb-14. EPA provided COC selections table to LWG on 25-Feb-14. EPA provided updated COCs table on 14-Mar-14. EPA additional revisions to COCs table was provided on 12-Apr-14. LWG provided outstanding issues list on 23-Apr-14.	①EPA provide a draft of COC selections table	Done	LWG Review 12-Apr-14 version of table and determine if any concerns exist	Done	27-Feb-14, 18-Mar- 14, 27-Mar-14, and 24-Apr-14	Kennedy, Toll		21-Feb-14	8-May-14	NA	NA
		PRG selections (including background values as needed)	EPA rationale for PRG changes and selections partially described. The LWG is requesting clarifications.  1) LWG disagrees with new BaPEq fish consumption PRG. 2) LWG may disagree with some other PRGs, or use of some PRGs (e.g., tissue target levels)—subject to additional discussions.  3) Source of background-based PRG values needs verification for some chemicals.  4) Spatial scale application of new PRGs needs clarification.	In progress: EPA provided PRG changes on 13-Nov-13 and follow up summary on 12-Dec-13 in response to LWG questions. LWG provided water PRG questions on 21-Feb-14. EPA provided direct contact human health PRG calculations and PRG spatial scales on 3-Mar-14 as well as updated PRGs. EPA provided updated PRGs and ecological PRGs tables on 14-Mar-14. EPA provided human health fish consumption PRG calculations tables on 18-Mar-14. EPA additional revisions to PRGs table was provided on 12-Apr-14. EPA provided BaPEq PRG calculations on 12-Apr-14. The EPA write-up for BapEq PRG will be provided with the Section 2 write-up at a later date (Updated per 7-Apr-14 email from Kristine Koch). EPA provided outstanding issues list on 23-Apr-14. LWG provided outstanding issues list on 23-Apr-14.		1) Due 27-Feb-14 [provided on 12- Apr-14] 2) Done 3) No action 4) Done [Updates provided on 18- Apr-14]	1) LWG review EPA calculations and PRGs table 2 LWG provide additional questions on water PRGs. 3) No action (was discussed on 27-Feb-14) 4) LWG review EPA spatial scales. Also, provided PRG outstanding issues list on 23-Apr-14.	1) Done 2) Done 3) No action 4) Done	4-Mar-14, 18-Mar- 14, 27-Mar-14, and 24-Mar-14	Kennedy, Toll	Allen, Shephard	4-Mar-14	8-May-14	NA	NA NA
		Application of MNR Technology (LWG "CSM" Issue)	EPA comments on draft FS disagreed with MNR lines of evidence approach including model use. Some discussions of model concerns have taken place, but these concerns were not resolved. The LWG believes may of the disagreements may be resolved through a more thorough discussion of the Site CSM. The LWG does not understand EPA's overall set of potential changes to MNR LOEs and modeling approach.	In progress: Hayter ran linked model and compared to LWG model on 24-Jan-13. LWG provided additional information on 15-Mar-13, 20-Mar-13, and 11-Apr-13. The 20-Mar-13 deliverable compared linked and unlinked model results and found only small differences, suggesting model concerns could be resolved as an uncertainty discussion in the revised FS. EPA requested additional bed elevation info 20-Nov-13. LWG provided bed elevation info 5-Dec-13. EPA requested additional information on modeled bed elevation changes and bedded sediment chemical concentration changes on 14-Mar-14. LWG provided requested information on 10-Apr-14.	memo on model use.	25-Mar-14 [past due]	None currently identified	None	EPA suggested postponing until Section 4 issue discussions	Russell, Werth, Ziegler	Gustavson, Hayter	24-Apr-14	TBD	NA	NA NA
		Capping evaluation methods (suitable areas): flux and stability	EPA informal FS presentations indicated potential changes to application of capping technologies to subSMAs or capping type variations (e.g., reactive capping).	Not started: Proposed changes not known yet.	Provide description of proposed technology application changes or existing concerns.	25-Mar-14 [past due]	None currently identified	None	10-Jun-14	Henderson	Gustavson, King	24-Apr-14	11-Jun-14	NA	NA
		EMNR evaluation methods (suitable areas)	EPA informal FS presentations indicated potential changes to application of EMNR technology to subSMAs.	Not started: Proposed changes not known yet.	Provide description of proposed technology application changes or existing concerns.	25-Mar-14 [past due]	None currently identified	None	10-Jun-14	Russell, Werth	Gustavson, King	24-Apr-14	11-Jun-14	NA	NA
		In-situ treatment evaluation methods (suitable areas)	EPA informal FS presentations indicated potential changes to application of in-situ treatment.	Not started: Proposed changes not known yet.	Provide description of proposed technology application changes or existing concerns.	25-Mar-14 [past due]	None currently identified	None	10-Jun-14	Gardner	Gustavson, King	24-Apr-14	11-Jun-14	NA	NA
		Changes to identification and selection of technologies (e.g., technology assignment decision tree)	EPA informal FS presentation indicated potential changes to criteria used to assign technologies to subSMAs. Changes to application criteria expected.	EPA provided presentation of technology selections approach on 1-Apr-14. EPA indicated the assessment was not yet completed. Additional exchanges of information from EPA and LWG identified. Issue discussed again on 24-Apr-14, where LWG provided some suggested refinements to the technology screening process. Several action item exchanges of information were identified. LWG provided refined structures layer from draft FS on 29-Apr-14.	Provide description of proposed technology application changes or existing concerns.	Due 18-Mar-14 (draft provided 1- Apr-14)	LWG provide feedback on EPA's technology matrix [Done at 24-Apr-14 meeting. LWG to follow up in writing.].	None	10-Jun-14	Russell, Werth, Henderson, Gardner, Verduin, Laplante	Gustavson, King	24-Apr-14	11-Jun-14	NA	NA
3.2-3.7, 6	Sec. 2 Writing	NA	NA NA	NA NA	NA	NA	NA	NA	NA	NA	NA	2-Jun-14	20-Aug-14	25-Aug-14	24-Sep-14

Existing Draft FS Sections			sion EPA Issues Summary Description		EPA Work Items <sup>9</sup>		LWG Work Items <sup>9</sup>		Target EPA/LWG	G Tentative Technical Leads		Current Issue Resolution Target Dates or EPA Draft Text Target Dates		LWG Review and Resolution Text Target Dates	
	Issue No.	EPA Issue Decision		EPA Issue Resolution Current Status	Item	Target Date <sup>1</sup>	Item	Target Date <sup>1</sup>	Meeting Date to Discuss	LWG <sup>5</sup>	EPA <sup>6</sup>	Start <sup>7,8</sup>	Finish	Start	Finish
Sections	3.1	Focused COC selections (RAL COCs)	See Issue 3.3	See Issue 3.3	See Issue 3.3		See Issue 3.3	See Issue 3.3	Discuss	Kennedy, Toll		17-Mar-14	4-Apr-14	NA	NA
	3.2	Integration of SDU analysis	EPA has conducted an independent analysis of SWACs generated by RALs to help determine whether SMAs are protective and should be revised or not.	In progress: EPA is conducting the SDU analysis. This information would be presented to LWG in the context of SMA discussions to determine whether any SMA changes should be made or not. Discussions would also help determine how the SDU analysis would be presented in the revised FS and be used to support the SMA determinations. EPA provided to LWG a portion of the SDU analysis on 28-Mar-14, and indicated on 27-Mar-18 that portions of the analysis are yet to be completed (e.g., risk reduction evaluation).	●EPA provide SDU information.	Due 21-Mar-14 (Draft provided on 28-Mar-14)	1) LWG review SDU information	4-Apr-14	3/27/2014 (partially discussed). Remainder of analysis still to be discussed.	Iverson	King	28-Apr-14	23-May-14 [suggested new date]	NA	NA
	3.3	RAL selections and application (dioxin RAL)	EPA identified proposed RALs, but has recently proposed converting PeCDF RAL to D/F TEQ RAL. LWG seeks clarification on 1) New TCDDEq RAL. 2) Additional Alt B, C, and D RALs (i.e., DDx) 3) LWG disagrees with application of BaPEq RAL in navigation channel.	In progress: EPA presented draft FS discussion Alt B,C, D RALs again on 13-Nov-13 and provided a follow up summary on 12-Dec-13 in response to LWG questions. EPA indicated a new potential D/F TEQ RAL on 30-Jan-14. LWG provide additional questions on DDx RALs rationale on 21-Feb-14. EPA provided D/F TEQ RAL rationale and map to LWG on 25-Feb-14. EPA provided DDx SWACs to LWG on 26-Feb-14. LWG provided expanded discussion of BaPEq RAL application disagreement to EPA on 28-Feb-14. RAL/SMA overlay with SDU analysis was scheduled to be discussed on 27-Mar-14, but EPA's presentation did not include this step. Action Items list indicates that most outstanding RAL items will be discussed as part of the SMA discussion (Issue 3.8)	●EPA provide new D/F TEQ RAL rationale and CDM mapping for D/F TEQ approach ② EPA provide comparative SWACs for DDE and DDx RALs. EPA then review LWG's new questions. 3) EPA review LWG's expanded discussion on BaPEq RAL	1) Done 2) Done 3) Done	1) LWG review rationale and maps 2 LWG review 2011 RALs rationale and prepare additional questions. LWG then review EPA's SWACS 3 LWG provide expanded discussion BaPEq RAL application disagreement	1) Done 2) Done 3) Done	13-Mar-14		King	13-Mar-14	23-May-14	NA	NA
	3.4	Comprehensive benthic risk area changes	Are the comprehensive benthic risk areas presented in the draft FS acceptable to EPA? What specific CBRA criteria may be of concern and why?	In progress: LWG sent CBRA GIS layers on 16-Feb-13. EPA and LWG technical leads discussed additional EPA questions about benthic risk areas methods week of 10-Mar-14. LWG provided additional information and maps on 12th and 13th of March 2014. EPA provided updated CBRAs and benthic risk rules on 4-Apr-14. LWG proposed and EPA did not object to making no changes to the SMAs based on revised CBRAs.	<b>1</b> EPA review LWG info and propose modifications to CBRAs, if necessary.	4/8/2014 (Draft provided on 4-Apr 14)	1) LWG awaiting any additional information requests and EPA determination of any CBRA changes.     2) LWG identify any concerns about these new benthic risk rules	1) Done 2) Done	13-Mar-14 (Discussed again on 18-Mar-18 and 24-Apr-14).	Toll	King, Shephard	13-Mar-14	2-May-14	NA	NA
	3.5	Principal Threat Material determinations	Draft FS concluded that all sediment chemicals can be reliably contained, which indicates there is no PTM. EPA has indicated disagreement with this conclusion but has not provided a specific rationale or information on proposed changes to PTM areas.	Not Started: EPA has an internal CDM memo from 25-Jul-13. EPA postponed discussion to mid-April 2014. EPA provided PTW memo on 10-Apr-14 and PTW presentation on 15-Apr- 15. EPA indicated that additional evaluation steps for PTW are yet to be conducted.	1EPA identify potential PTM areas and supply maps and rationale.	Due 8-Apr-14 (Provided on 10- Apr-14)	LWG review PTW memo and presentation and provide feedback to EPA	25-Apr-14 (new date)	15-Apr-14 (partially discussed). Remainder of analysis still to be discussed.		Blischke, Sheldrake	e 3-Mar-14	23-May-14 [suggested new date]	NA	NA
	3.6	Oregon Hot Spots determination	Spots. EPA and DEQ have indicated disagreement with this conclusion but have not provided a specific rationale	Not Started: EPA has provided some GIS mapping information to DEQ on this issue. DEQ is conducting evaluations on this issue. EPA postponed discussion to mid-April 2014. EPA indicated on 15-Apr-14 that Oregon Hot Spots were not an ARAR, and DEQ provided a letter that they had ceased work on Hot Spots for Portland Harbor.	◆DEQ identify potential Oregon Hot Spot areas and supply maps and rationale to EPA and LWG.	Suspended	None currently identified	None	Suspended		Gainer	3-Mar-14	Suspended	NA	NA
	3.7	TZW area changes (SMA impacts)	EPA comments indicated that HQ>100 threshold should not be used to assess TZW impact areas. Depending on how EPA would like to revise this approach, it could impact the size and shape of SMAs.	Issue was discussed on 1-Apr-14. EPA indicated that no changes to SMAs would occur due to TZW area evaluations. However, EPA selection of technologies (Issue 2.8) in groundwater plume areas may be revised. Issue resolved.	1 EPA provide additional information on draft FS TZW impact analysis concerns.	Done [via verbal discussion]	None currently identified	None	1-Apr-14		Fuentes	17-Mar-14	1-Apr-14 [date resolved]	NA	NA
	3.8	SMA revisions	EPA has conducted independent analyses relevant to potential SMA changes (i.e., Issues 3.2 through 3.7). EPA will determine whether any SMA changes are needed for the revised FS.	LWG provided memo on process decisions steps for incorporating RALs for Alts B, C, D on 17-Jan-14. RALs discussions that potentially impact SMA boundaries have progressed through 14-Mar-14. No progress on this issue occurred when it was last discussed on 1-Apr-14.	1 EPA review LWG RALs memo	25-Mar-14 [past due]	None currently identified	None	8-May-14, 31-Jul- 14, and 5-Aug-14		King, Gustavson	5-May-14	6-Aug-15	NA	NA
	3.9	Buried contamination analysis revisions	EPA has indicated potential concerns about the buried contamination analysis.	Not started	None identified	NA	None identified	NA	8-May-14		Blischke, Gustavson	26-May-14	30-May-14	NA	NA
	3.10	SubSMA revisions <sup>2</sup>	EPA has yet to determine how technology screening and SDU analysis will impact subSMA development, if at all.	Not started	None identified	NA	None identified	NA	8-May-14		King, Gustavson	2-Jun-14	20-Jun-14	NA	NA
	3.11	Disposal site assignments (including CDF decisions and screening of disposal options)	EPA has indicated the desire to change the disposal site selections for each alternative including "present Alternatives C through G without CDF construction (assume all dredged material is taken offsite), and the remedial options that would be used in the areas that were within the footprint of the CDFs."	Chip Humphrey and Jim McKenna agreed to have a technical discussion before any information was provided by LWG.	None identified	NA	Determine after discussion	NA	8-May-14	Schwarz, Verduin	Sheldrake	26-May-14	30-May-14	NA	NA
	3.12	CDF sediment and discharge water treatment	EPA provided information requests on these topics on 20- Nov-13.	Chip Humphrey and Jim McKenna agreed to have a technical discussion before this information was provided by LWG.	None identified	NA	LWG provide EPA requested information after discussion	TBD	8-May-14	Schwarz, Verduin	Sheldrake	2-Jun-14	6-Jun-14	NA	NA

DRAFT FS Revision Process Matrix May 2, 2014

Existing	Issue			EPA Issue Resolution Current Status	EPA Work	Items <sup>9</sup>	LWG Wo	ork Items <sup>9</sup>	Target EPA/LWG	Tentative Technical Leads		Current Issue Resolution Target Dates or EPA Draft Text Target Dates		LWG Review and Resolution Text Target Dates	
Draft FS Sections	Issue No.	EPA Issue Decision	EPA Issues Summary Description		Item	Target Date <sup>1</sup>	Item	Target Date <sup>1</sup>	Meeting Date to Discuss	LWG⁵	EPA <sup>6</sup>	Start <sup>7,8</sup>	Finish	Start	Finish
	3.13	Changes to volume estimates and dredge depth assumptions	EPA has indicated these estimates may need to be changed.	Not started	None identified	NA	None identified	NA	22-May-14	Verduin	King	2-Jun-14	13-Jun-14	NA	NA
	3.14	Screening of alternatives methods (including screen of Alt G.)	EPA has indicated a desire for a new alternative screening process.	Not started	None identified	NA	None identified	NA	31-Jul-14 and 5- Aug-15		King, Blischke	16-Jun-14	6-Aug-15	NA	NA
	3.15	Number of alternatives selection	EPA has indicated that the numbers and types of alternatives passing through to detailed evaluation may change.	Not started	None identified	NA	None identified	NA	31-Jul-14 and 5- Aug-15		King, Blischke	30-Jun-14	6-Aug-15	NA	NA
	3.16	Green aspects - short term impacts	EPA added this issue to the issue matrix.	Not started	None identified	NA	None identified	NA	TBD		Sheldrake	TBD	TBD	NA	NA
	Sec. 3 Writing	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	16-Aug-14	18-Oct-14	23-Oct-14	22-Nov-14
	4.1	Alternative options selections or refinements (e.g., -r and -i)								Verduin	King, Blischke	7-Jul-14	11-Jul-14	NA	NA
	4.2	Sequence of SMA remediation								Verduin	King, Blischke, Sheldrake	14-Jul-14	18-Jul-14	NA	NA
	4.3	Duration calcs. (prod. rates, no. of dredges, hour/day, etc.)								Verduin, Laplante	Gustavson, Schroeder	21-Jul-14	25-Jul-14	NA	NA
	4.4	NMFS work window assumptions								Laplante, Appy	Sheldrake	28-Jul-14	1-Aug-14	NA	NA
	4.5	Dock removal decisions								Verduin, Laplante	King, Sheldrake	4-Aug-14	8-Aug-14	NA	NA
	4.6	Dredge water quality containment decisions (e.g., sheet piles)								Verduin, Laplante	Gustavson, Schroeder, Sheldrake	11-Aug-14	15-Aug-14	NA	NA
	4.7	Dredge residuals and release assumptions								Verduin, Laplante, Patmont	Gustavson, Schroeder, Sheldrake	18-Aug-14	22-Aug-14	NA	NA
	4.8	Habitat mitigation calculations								Appy, Oster	Sheldrake	25-Aug-14	29-Aug-14	NA	NA
	4.9	Changes to cost estimate methods <sup>3</sup>								Verduin	Hazen, King	1-Sep-14	5-Sep-14	NA	NA
	4.10	Changes to evaluation spatial scales presentation								Iverson, Werth		8-Sep-14	12-Sep-14	NA	NA
	4.11	T=0 risk reduction and forward projections (e.g., T=45)								Russell, Werth	King, Blischke, Allen	15-Sep-14	26-Sep-14	NA	NA
	-	Changes to time to meet RAOs evaluation										29-Sep-14	3-Oct-14	NA	NA
		F&T modeling revisions/reruns vs. alternate approaches								Zeigler	Gustavson, Hayter	6-Oct-14	17-Oct-14	NA	NA
		Flood rise modeling changes								Zeigler	Sheldrake, COE	20-Oct-14	24-Oct-14	NA	NA
		Worker risk calculation methods	<u> </u>			-	1		<del>                                     </del>	Merritts	Sheldrake	27-Oct-14	31-Oct-14	NA	NA
		ESA compliance determinations  Cost effectiveness evaluation	+				+		+	Appy, Oster Patmont	Sheldrake Blischke	3-Nov-14 10-Nov-14	7-Nov-14 14-Nov-14	NA NA	NA NA
		Scoring/weighting of alternatives <sup>4</sup>				+	+	_	+	Patmont	Blischke,	10-Nov-14 17-Nov-14	21-Nov-14	NA NA	NA NA
		Place holder for any other changes to								Tutilone	Gustavson	17 1107 14	21 1107 14	NA .	144
	0	alt. evaluation methods													
	Sec. 4 Writing		NA	NA	NA	NA	NA	NA	NA	NA	NA	1-Nov-14	19-Jan-15	24-Jan-15	23-Feb-15
11	Ref.	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1-Jan-14	23-Feb-15	NA	NA

Color indicates who has any lead items, while 1 indicates specific items for which the lead is designated (i.e., who has the "ball").

Color indicates section writing process after all issues related to that section are resolved.

1 - Target dates for work items generally shown to be one week before issue resolution target start date.

2 - Per the LWG's 16-Jan-2014 RALs memo, developing new subSMAs and assigning new technologies is expected to take 4 to 10 weeks in total. About 4 weeks of this period is included in the dates shown above for resolution of issues prior to 3.9. Therefore, depending on the level of EPA changes, an additional 4 to 6 weeks could be needed at this point in the above process to fully integrate all the EPA changes into revised alternatives.

3 - Per the LWG's 16-Jan-2014 RALs memo, developing new alternatives with changes to the methods addressed by issues 3.10 through 3.23 is expected to take 4 to 8 weeks. None of this additional time is included in the dates shown above, which only include time to determine and resolve the need for changes for each of the noted issues.

4 - Per the LWG's 16-Jan-2014 RALs memo, conducting revised evaluations of new alternatives with changes to the evaluation methods addressed by issues 4.1 through 4.10 is expected to take 6 to 12 weeks. None of this additional time is included in the dates shown above, which only include time to determine and resolve the need for changes for each of the noted issues.

5 - All LWG teams include Carl Stivers and Amanda Shellenberger.

6 - All EPA teams may include representation from Chip Humphrey or Kristine Koch.

7 - EPA will determine prior to the current issue resolution target start date whether EPA has a confirmed issue with the draft FS approach. If so, all issue supporting analyses must be completed and supporting materials made available prior to the issue resolution target start date.

8 - Dates for section text revisions will be pushed back if all the issues related to that section have not been successfully resolved by the draft text target start date.

9 - All of the noted work products (EPA and LWG) are considered "drafts" during this informal discussion process.

All dates are subject to change

Any informal dispute process for the set of issues in each section would occur by the final date of the last issue resolution in that section.

This matrix identifies the EPA and LWG tentative technical leads for each issue. Additional EPA and LWG technical staff may be identified on an issue-specific basis to attend various meetings.

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TBD - EPA is currently revising text revisionschedules, and these dates will be determined soon.